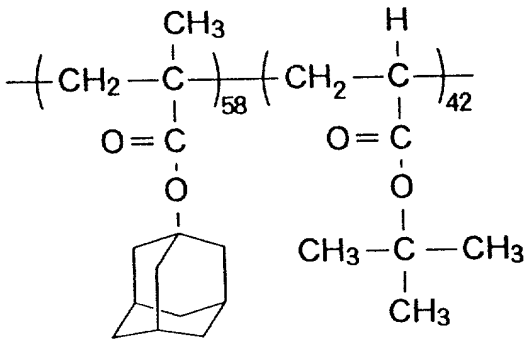
THE ABSTRACT OF THE DISCLOSURE

A copolymer expressed by the following structural formula



was obtained by loading adamantyl methacrylate monomer and t-butyl acrylate monomer by 1:1, then conducting polymerization, adding AIBN as a polymerization initiator, and then conducting precipitation purification with methanol. Then to the copolymer, triphenylsulfonium hexafluoroantimonate was added to prepare a cyclohexanone solution. This solution was applied to a wafer, and exposed to a KrF excimer stepper and developed. The threshold energy Eth was 50 mJ/cm^2. A 0.45 μm-wide L & S was formed at 130 mJ/cm^2. The radiation sensitive material has good transparency and etching resistance, high sensitivity, and little peeling.